

ABSTRACT

A disclosed substrate includes an electrically insulating circuit board, a pair of electrical lead pads
5 adapted for mounting a light-emitting diode (LED) on a first surface, and a heat dissipating structure
on the first surface. The heat dissipating structure includes an LED thermal pad adapted to abut the
LED when mounted on the electrical lead pads, and a heat dissipation region extending from, and
thermally coupled to, the LED thermal pad. The substrate also includes a thermally conductive
plating on a second surface of the substrate opposite the heat dissipation region. A described
10 lighting assembly includes the substrate, multiple LEDs connected to the electrical lead pads of the
substrate, and multiple traces of the substrate connect the LEDs in a series circuit electrically
isolated from the heat dissipating structures.